

# Successive Cyclicity in Linearization of V3 in Old English

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## 〔要旨〕

### 古英語の V3 語順線状化における連続循環性

古英語は動詞の位置に関して多くの語順があることが知られているが、中でも V3 語順は近年議論されてきたものである (Fischer et al. 2000, Ringe and Taylor 2014 など)。本論文では、古英語 (OE) の V3 の統語的分析を取り上げ、Cardinalate and Roberts (2002) によるアイスランド語の二つの主語位置に関する分析についてレビューし、Müller (2007) による 2 タイプの V2 の線状化について論じる。

Ringe and Taylor は古英語の V2 構文を *wh* 語や否定辞 *ne* などの要素を前置した操作子前置型と非操作子前置型とに分類し、V3 は後者の変異形とされている。非操作子前置 V2 構文では、主語は TP 下の低い位置 (C and R では Agr2P 主要部) を取る。V3 構文では、主語は TP の高い位置 (C and R では Agr1P 主要部) を取る。Ringe and Taylor の分析と対応する Fischer et al. (2000) は、OE の V3 構文を分析して、CP と TP のあいだの FP に高い位置の主語を置いている。しかしながら、FP の詳細は解決できていない。Cardinaletti and Roberts (2002) は OE と他の言語の V3 を分析して、定形動詞が後に続く代名詞は後接辞 (proclitic) であると仮定し、定形動詞は T から低い AgrP (Agr2P) を経由して代名詞と結合するとしている。そこでは、Agr1P は主語位置に限られない。また、これに対応する素性は正確には指定されていない。

Müller (2007) は、Fox and Pesetsky's (2005) の「循環的線状化」理論を採用し、2 種類の V2 語順を分析している。Müller は V2 を近代ドイツ語のような SOV 言語のタイプとデンマーク語のような SVO 言語のタイプに分類し、C and R による OE の非操作子前置型の V2 は後者と見なすことができる。

ドイツ語の代名詞は Müller の理論では、*v*P から TP と *v*P とのあいだの高い投

射である  $\mu P$  のエッジを通して元位置から動くことができる。Müllerの分析では、Gallego and Uriagereka (2006) による「関連フェーズ」(relevant phase) を援用して TP をフェーズと考えているが、Citko (2014) などの最近のミニマリスト理論の標準の見方ではフェーズと見なされていない。しかし、この仮説は非操作子タイプの V2 と V3 は CP 投射を持たないという Ringe and Taylor の分析に一致する。

本論文では、上のような仮説に立ち、OE における続く V3 の代名詞は TP の下の  $vP$  からそのエッジを通して、定形動詞と結合し、TopP と Merge する、それは CP 投射なしに行われるが、それは関連フェーズになるために TP は排出されると提案する。

## 0 Introduction

This paper aims to analyse verb-third (V3) order in Old English (OE) from the perspective of the linearisation theory in successive cyclicity. First, we will review some earlier V3 literature in OE and the theories phase and linearisation. Then, we will modify the earlier analyses of V3 to proceed to a linearisation model of V3 in OE

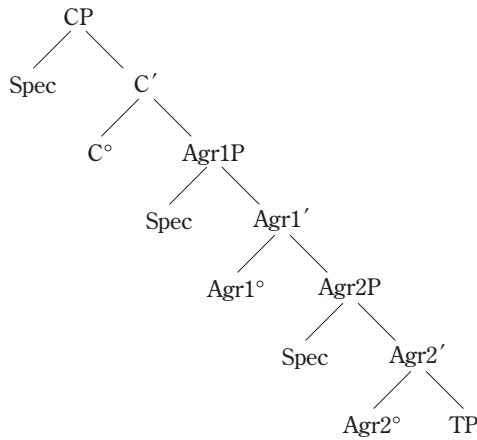
## 1 Verb-second and the higher and lower positions of the subject

Ringe and Taylor (2014: 399-402) classify Verb-second (V2) constructions into two types, Operator-fronting V2 and Non-operator-fronting V2

The positions of subjects in V2 constructions can be recognised as the higher position or the lower position according to the type of V2, as seen in the construction illustrated below.<sup>(1)</sup>

- (1) Two subject positions in V2 construction (Figure 1)

This analysis was proposed by Cardinaletti and Roberts (2002), extending Chomsky's proposal.<sup>(2)</sup>



**Figure 1**

### 1.1 Operator-fronting V2

Ringe and Taylor classify V2 constructions not by relying on the positions of the subjects but, instead, on the first elements, by which one type of V2 can be characterised.

*Operator* stands for the class of functional elements, which contains the interrogative *hwæt* (what), the negation *ne* (not), and the adverb *þa* (then).<sup>(3)</sup>

- (1) a. Hwæt secgce **ge**?  
 What say you  
 ‘what do you say?’  
 (coaelhom, +AHom\_3:24.42i)
- b. hwær scyne **seo sunne** on niht  
 where shines the sun at night  
 ‘where does the sun shine at night?’  
 (coadrian, Ad:6.1.15)
- (2) a. Ne hate **ic** eow na þeowan,

- NEG call I you not servants  
 ‘I do not call you servants’  
 (coaelive, +ALS\_[Eugen184.238])
- b. Ne gesceop **God** þone deað  
 NEG created God the death  
 ‘God did not create death’  
 (coaelhom, +AHom\_11:107.1547)
- (3) a. Ða andwyrde **he** him þus  
 ‘then he answered them as follows’
- b. Pa het **se bisceop** hi gelangian  
 Then commanded the bishop her call  
 ‘then the bishop commanded to call her’  
 (coaelive, +ALS\_[Eugenia]:74.232)
- (Ringe and Taylor 2014: 400, (6), (7), (8))

Ringe and Taylor adopt the standard analysis of V2 for German and apply it to *operating-fronting* V2 in OE, discussing that “[i]t is by now well accepted that operator-fronting involves movement of the operator to spec, CP and the verb to C, as is standard in analyses of German V2.”

## 1.2 Non-operator-fronting V2<sup>(4)</sup> and V3

Ringe and Taylor (2014: 401) analyse that V2 and V3 constructions, as in the examples below, are non-operator-fronting V2.

- (4) a. Ðas fif andgitu gewisseð **seo sawul** to hire wyllan  
 (coaelive, +ALS\_[Christmas]:202.161)  
 these five senses direct the soul to her will  
 ‘the soul directs these five senses according to her will’
- b. æfter his gebede **he** ahof þæt cild up  
 (cocathom2, +ACHom\_II\_2:14.70.320)  
 after his prayer he lifted the child up  
 ‘after his prayer he lifted the child up’

Such constructions consider pronouns in the V3 position not to be clitics, arguing as follows:

Early accounts assumed the subject pronoun was a clitic and thus didn't fill a position in the syntax (van Kemenade 1987, Pintzuk 1996, Kroch and Taylor 1997), while more recent proposals (Haeberli 2001, 2005, van Kemenade 1999, van Kemenade and Milićev 2012, Walkden 2012, 2014, a.o.) have instead assumed two subject positions, one before and one after the position filled by the finite verb. The higher subject position is restricted primarily to (clitic/weak) pronouns, and the lower to other subjects (but see section 8.2.3 (ii.c) V3 with non-pronominal subjects) . . . .

(Ringe and Taylor 2014: 401)

Ringe and Taylor (2014) discuss this analysis from the assumption of split-TP analysis as follows:

Such [higher subject position] proposals require a so-called split-TP analysis in which there is more than one phrase within the TP-domain. The labelling of such phrases differs in different proposals (see references above), but here I will simply refer to them as TP<sub>1</sub> and TP<sub>2</sub>. Thus, the higher subject position (SU<sub>1</sub>) is the specifier of TP<sub>1</sub> and the lower subject position (SU<sub>2</sub>) is the specifier of TP<sub>2</sub>.

(Ringe and Taylor 2014: 401)

However, although Cardinaletti and Roberts (2002) also presuppose split-TP projection within checking theory; they adopt clitic analysis for V3 pronouns, discussing Icelandic and other languages, including Old English.

They don't illustrate their schema, however, which is instead cited from Fischer et al. (2000: 126):

(5) Pronoun subject position for V2 and V3 Fischer et al. 2000: 126, (72))

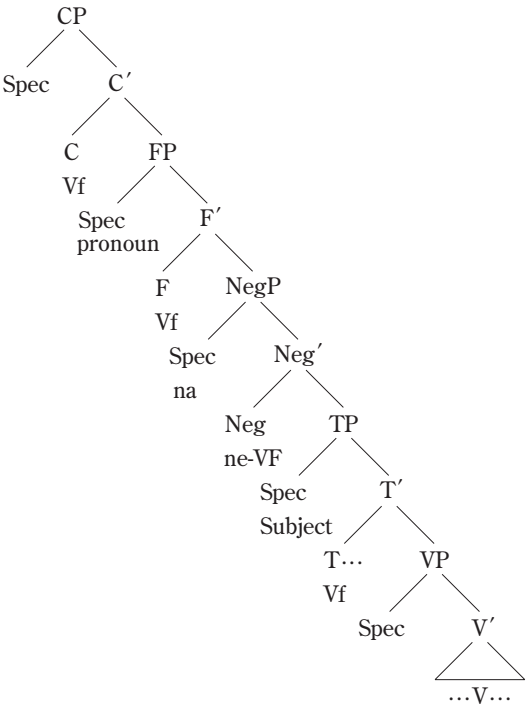


Figure 2

Pronouns in V3, which are mainly subjects, occupy Spec-FP.<sup>(5)</sup>

1.3 Object pronouns in V3 word order

Ringe and Taylor (2014) observe that object pronouns can appear in the same position as the higher subject position in V3 constructions as follows:

- (6) a. and **hy hit** wurpon þa ut  
and they it threw then out

- ‘and then they threw it out’  
(coaelhom, +AHom\_15:19.2147)
- b. Ða godan gastas **hine** tugon upp  
the good spirits him drew up  
‘the good spirits drew him up’  
(cogregdC, GDPref\_and\_4\_[C]:37.320.13.4805)
- c. and nu **ic** **hit** **eow** secge and now I it you say  
‘and now I say it to you’  
(coaelhom, +AHom\_10:22.1418)
- (Ringe and Taylor 2014: 402, (10)a,b, c)

Although Ringe and Taylor claim that subject and object pronouns can appear in the position as multiple pronouns, as seen in (6a) and (6c), they don’t mention the derivation in their construction.<sup>(6)</sup>

We will see that the problem of subject and object pronouns should be analysed by the Order Preserving Principle in chapter 2.

#### 1.4 V3 with non-pronominal subjects

Ringe and Taylor (2014) adopt Haeberli’s (2002) claims ‘the examples in [(7)], in which a DP subject following a fronted non-operator fails to invert, are (or may be)’ the type of V3 construction with a high subject position, as follows:

- (7) a. [ðone] *Denisca leoda* lufiað swyðost  
that Danish people love most  
‘The Danish people love that one most’  
(cowulf, WHom\_12:56.1190)
- b. [æfter þan] *þæt lond* wearð nemned Natan leaga  
after that that land was called Natan lea  
‘after him, that land was called Netely’  
(cochron A-1, ChronA\_[Plummer]: 508.1.174)
- (Ringe and Taylor 2014: 402, (11)a,b, c)

They also show some secure V3 with non-pronominal subjects in accordance with their post-verbal diagnostic, adding their own data to one example from Haeberli, as follows:

- (8) a. [þa] [æfter þære mæssan] *seo modor and seo dohtor* astrehton  
 Then after the mass the mother and the daughter prostrated  
 hi on prayers themselves in gebedum  
 ‘then after the mass the mother and the daughter prostrated  
 them-selves in prayers’  
 (coaelive, +ALS[Lucy]:20.2178)
- b. [Pæne] *se geatweard* læt in That the doorkeeper let in ‘the doorkeeper  
 let that one in’  
 (cowsgosp, Jn\_[WSCp]:10.3.6597)
- c. [ÆFTER þison] *Moyse & Aaron* eodon in After this Moses and Aaron  
 went in ‘after this Moses and Aaron went in’  
 (cotest, Exod: 5.1.2466)

(Ringe and Taylor 2014: 403, (12))

Although the position for the higher pronoun subject is persuasively occupied by subject pronouns, which have been weak determiner phrases or clitic, an alternative analysis has been proposed by Speyer (2010), which the following sections discuss.

## 2 The Order Preserving Principle (Fox & Pesetsky 2005, Citko 2014)

Citko (2014) adopts the linearisation theory by Fox and Pesetsky (2006). Citko (2014) claims that linear order is established within one Spell-Out, in a cyclic fashion, as expected in a Multiple Spell-Out architecture. She also claims, as Order Preservation, that the ordering established within one Spell-Out domain cannot be changed in subsequent Spell-Out domains.

According to Citko (2014: 185-7), we will illustrate how Order Preservation works. (9a) illustrates a single Spell-Out domain (D1) consisting of three



elements, X, Y, and Z. (9b) states the ordering for the domain  $D_1$ , as follows:

(9) a.

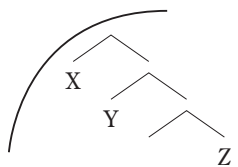


Figure 3

b. Ordering statements within  $D_1$ :  $X > Y, Y > Z$

If element  $\alpha$  merges with  $D_1$ , it will be linearised in domain  $D_2$ .

(10) Merge  $\alpha$

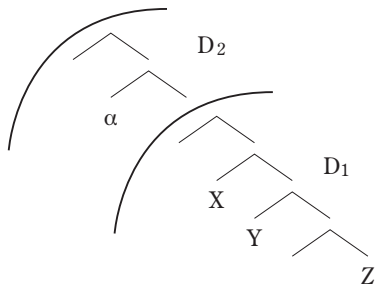


Figure 4

The Order Preservation Principle works to maintain the order  $X > Y$  through sequential derivations.

In (10), X at the edge of  $D_1$  can freely move out of  $D_1$ ; the movement of X causes no change of ordering between X and Y in (11), as follows:

(11) a. Move X

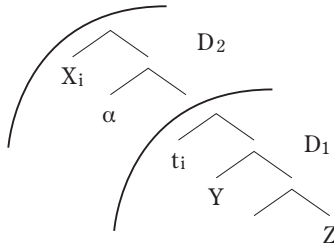


Figure 5

- b. Ordering within  $D_1$ :  $X > Y$ ,  $Y > Z$
- c. Ordering within  $D_2$ :  $X > \alpha$ ,  $\alpha > D_1$

If Y in the non-edge position of  $D_1$  moves out of  $D_1$ , the movement of Y causes the change in ordering between X and Y that was previously established in (10), as follows:

(12) a. Move  $Y^{(7)}$

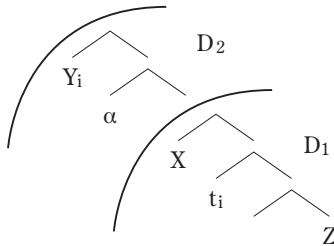
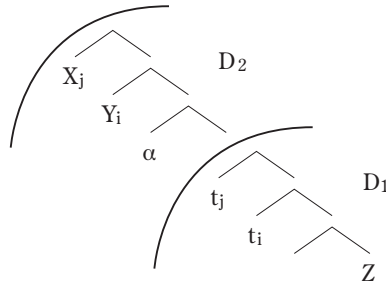


Figure 6

- b. Ordering within  $D_1$ :  $X > Y$ ,  $Y > Z$
- c. Ordering within  $D_2$ :  $Y > \alpha$ ,  $\alpha > D_1 \rightarrow \alpha > X^{(8)}$

In this case, Y can move out from  $D_1$  if X also moves, because their relative order is preserved as follows:

- (13) a. Move X and Y



**Figure 7**

- b. Ordering within  $D_1$ :  $X > Y, Y > Z$
- c. Ordering within  $D_2$ :  $X > Y, Y > \alpha, \alpha > D_1$

The Order Preservation Principle allows the movement of an element from a non-edge position if the relative order is preserved after the movement occurs.<sup>(9)</sup> Müller's (2007) theory is based on this principle, but he reveals several problems in Fox and Pesetsky's (2005) analysis and revises the original concepts of linearisation.

### 3 Linearisation of V2 (*Müller 2007*)

#### 3.1 Müller (2007)'s Proposals for the Linearization Theory

Müller (2007) proposes three assumptions for his Linearisation theory as follows:

The first assumption is that syntax exhibits a strictly derivational organi-

zation. This implies that pieces of information that are accessible at one stage of the derivation (including ordering statements) may be inaccessible at later stages; i.e., information may be lost in the course of the derivation. Second, the approach is based on a relativization of ordering statements: Instead of fixed spell-out domains (like vP/VP and CP), the creation of ordering statements is assumed to be a relativized property of two structure-building operations-feature-driven vs. non-feature-driven Merge.

(Müller 2007: 78)

As we can see above, Müller (2007) classifies Merge operations into two types: feature-driven Merge and non-feature-driven Merge. He assumes non-feature drive Merge to linearise ordering in a cyclic way. We will return to this point later.

Müller takes up some examples of Modern German V2 to indicate the defect of Fox and Pesetsky's analysis as follows:

- (14) a. Maria<sub>1</sub> las<sub>0</sub> [vP t<sub>1</sub> [vP das Buch<sub>2</sub> to ]]  
           Maria.NOM read      the book.Acc  
       b. dass [ vP Maria<sub>1</sub> [vP das Buch<sub>2</sub> las<sub>0</sub> ]]  
           that Maria.NOM      the book.ACC read  
       c. Das Buch<sub>2</sub> las<sub>0</sub> [vP Maria<sub>1</sub> [vP t<sub>2</sub> t<sub>0</sub> ]]  
           the book.Ace read Maria.NOM

(Müller 2007: 74, (20))

Müller examines two approaches to these V2 examples. The first is that 'SOV languages have a uniform base order where the verb precedes the object (V < DP)'. Under this supposition, he argues for 14-c that, 'it has to undergo local movement across the verb'. This consequence faces a contradiction of ordering with the initial word order.

The second approach is that 'SOV languages have a uniform base order; however, this time the uniform order is DP < V'. This consequence also faces a contradiction of ordering with the initial word order.

He points out, as above, that verb-second in SOV and SVO languages cannot

be linearised in a natural way, adopting Fox and Pesetsky's sense of linearisation. Instead, he proposes his relativised linearization theory. He illustrates that his theory goes well with V2 in SOV and SVO languages, which implies that the analysis of V3 in a narrow syntax need not be maintained.

### 3.2 V2 in SVO languages

Müller analyses the linearization of Danish, which has an SVO word order, as follows:

- (15) [CP Hvorfor [c' [v + v + T + c købte ] [TP Peter<sub>2</sub> [T tv + V + T [vp t'<sub>2</sub> [v' den<sub>1</sub> [v' it ikke[<sub>v</sub>t<sub>2</sub> [v' tv + v [vp t<sub>v</sub> t<sub>1</sub>]]]]]]]]]]]]]]? not  
(Müller 2007: 104)

When DP<sub>1</sub> merges with *v'* after DP<sub>2</sub> merges with *v'*, the order DP<sub>1</sub> < V + v occurs. DP<sub>2</sub> moves to Spec-*v*P, yielding the order DP<sub>2</sub> < V + v. In the cycle of TP, when DP<sub>2</sub> moves to Spec-T after V + v moves to T, the domain of T is spelt-out. In the last stage, when *købte* moves to C through the probe feature of T, the order V + v + T + C < DP<sub>1</sub> occurs. Although this order contradicts the previous order DP<sub>1</sub> < V + v, the domain of T has already been spelt-out as T.<sup>(10)</sup>

### 3.3 V2 in SOV Languages

Modern German is a typical SOV language in which, like embedded clauses, main clauses are derived from SOV order as follows:

- (16) [CP [DP<sub>1</sub> Maria ] [c' [v + v + t + c las [TP t<sub>1</sub>] [vP t<sub>1</sub>' [v' t<sub>1</sub> [v' Maria.NOM read [vp [DP<sub>2</sub> das Buch ] tv ] tv+v ]]] tv+v+T ]]]] the book.ACC

In the first stage,  $V$  moves to  $v$ , yielding the order  $DP_2 < V + v$ . Then,  $DP_1$  merges with  $v'$ , yielding the order  $DP_1 < V + v$ ,  $DP_1 > DP_2$ . Consecutively,  $DP_1$  moves to Outer-Spec- $v$ , newly yielding the order  $DP_1 < V + v$ , and preserving the same order in the last stage when  $V + v + T$  moves to  $C$  and  $DP_1$  moves to Spec-CP through feature-driven movement. The order between  $DP_1$  and  $DP_2$  is irreverent because  $DP_2$  is spelt-out as a part of domain  $v$  after the derivation of  $vP$  finishes before  $V + v + T$  moves to  $C$ .

$V_2$  in SOV and SVO languages correspond to operator-fronting  $V_2$  and non-operator-fronting  $V_2$ , respectively. So we can take apart the narrow syntax based on D-structure and develop diachronic syntax using the minimalist approach.

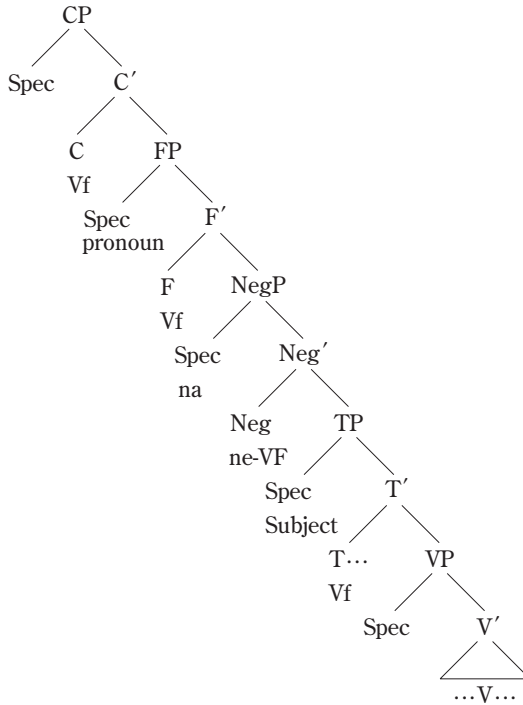
## 4 Feature-driven and Non-feature-driven Merge and the Derivation of V3 Word Order

### 4.1 The Function Head of Pronoun in V3

Fischer et al. (2000: 126) illustrate clause construction in Old English as recited below:

They explain the structure in (17) as “[w]e remain neutral on its precise properties and call it FP. Let us assume that pronominal subjects (and, optionally, objects) inhabit Spec, FP in the structure [(17)]”. If FP does not have any specific feature, feature-driven Merge cannot hold. Non-feature Merge in Müller solves this critical point.

(17)



**Figure 8** (= Figure 2)

(Fisher et al. 2000: 126, (72))

#### 4.2 Verb Movement in V3

Cardinaletti and Roberts (2002) analyse V3 construction, assuming the checking theory, the schema of which is shown in (1). Their central idea of analysing V3 is that pronouns followed by verbs should be proclitics, which don't appear in the Operator-fronting type of V2 because:

In contexts where the verb is in C and an XP of a particular class is in SpecC, the clitic follows the verb. In OE, these contexts involve a

Wh-constituent, the negative element *ne* or the adverb *þa* ‘then’ in initial position, all of which can be plausibly treated as elements in SpecC triggering movement of the inflected verb to C[.]

On the contrary, V3 realises the same construction as non-operator type V2, which does not host the CP domain. Pronouns followed by the finite verb in V3 occupy the positions stated in Cardinaletti and Roberts (2002), as follows:

Parallel with our analysis of the Tobler-Mussafia effect ..., we propose that ...the clitic occupies Agr1°.

Limiting their analysis to OE V2 and V3, they argue the constructions as follows:<sup>(11)</sup>

[W]here Agr1° is a ‘pure’ verbal position (in the sense that the only element that ever appears there is the verb), its specifier is a topic position. Suppose, then, that it is the fact that Agr1° may host a clitic that makes it possible for it to assign Nominative Case under agreement.

They illustrate the schema for the analysis of non-operator type V3 in OE, stated above, as follows:

- (18) [Agr1P TOP [[Agr1°Cl + Vi] [Agr2P Subj. [[Agr2°fi] ... ]]]]  
(Cardinaletti and Roberts 2002, (46a))

They conclude the function of Agr1° as follows:

- (19) a. Agr1° assigns Nominative Case (although it may not be the only Nominative-assigner ...)  
b. The nature of a specifier position depends on the possible content of the head specified.  
(Cardinaletti and Roberts 2002, (48))



Finite verbs are not considered to occupy Agr1° for the checking or agreement of the nominative case because Cl in Agr1° is not limited to subject in OE. Cardinaletti and Roberts explain this movement or internal Merge as follows:

[I]n OE the head [Agr1° Cl + V] is formed by an instance of verb-movement that is not triggered by the clitic. Because of this, we consider these cases of Agr1° to be verb positions, and so the account given earlier (after [(18)]) applies.<sup>(12)</sup>

Cardinaletti and Roberts (2002), to a large extent, clarify the construction of V3 and the movement of Verbs to the syntactic position, which is analysed as Agr1° in the checking theory. However, their analysis has not solved how the clitics first move to Agr1°; they put aside the feature in which the clitics have to trigger the movement of V to Agr1°.<sup>(13)</sup>

## 5 Successive Cyclic Movement

Phase theory counts CP, *v*P, and DP as phases, excluding TP and VP. Chomsky (2000) argues that *v* should be a phase because all theta-rolls are assigned. Non-operator V2 constructions in OE lacking the CP domain would be a serious problem if we adopted the phase theory under the Minimalist framework.

Müller (2011: 102–4) supports Gallego and Uriagereka’s (2006) theory which assumes that a “*v*-to-T movement may result in TP (rather than *v*P) becoming the relevant phase; i.e., movement of *v* carries the phase property along.” Their theory does not contradict Cardinaletti and Roberts’ analysis because TP becomes a phase after finite verbs move from *v* to Agr1, accompanying the phase property.

Clitics moves from *v*P to Agr1° if we adopt Müller’s (2007) relativised linearization because clitics can move to Agr1° via the edge of *v*P through non-feature movement, relying on the Phase Balance theory, which enables the movement of

elements under  $vP$  to upper domains by successive cyclic movement.

Müller does not analyse V3, however, he analyses Pronoun Fronting in German, which enables us to analyse V3 in a successive cyclic way. He illustrates the linearization of such constructions as follows:

- (20) dass  $[_{TP} [_{DP_2}$  der Fritz]  $[_{\mu P}$   $t_2$ ]  $[_{\mu'}$  es  $[_{vP}$   $t_2'$   $[_{v'}$   $t_1'$   $[_{v'}$  gestern  $[_{v'}$   
that the Fritz it yesterday  
 $t_2$   $[_{vP}$   $t_1$   $t_v$   $[_{v'}$   $[_{v+v}$  gelesen ]]]]]]]]] hat  
read has  
(Müller 2007, (40b))

T in (20) has an EPP feature, which raises  $DP_2$  to TP-Spec as the subject, where EPP on T is optional for German. He introduces  $\mu P$  to host the pronoun, which has moved from VP via  $vP$ . He states:

Whereas object shift is feature-driven movement to the specifier of  $v$ , pronoun fronting targets a higher functional projection  $\mu P$  that intervenes between TP and  $vP$ ; A-movement properties are associated with the former position, A-bar movement properties are associated with the latter.

We would like to adopt  $\mu P$  to analyse V3 in OE as shown in (18), however, some modifications are needed. If we substitute  $\mu P$  for  $Agr1^\circ P$  to host the clitics in V3, then, we will need to move  $V + v + T$  to  $\mu P$ . If we assume the EPP feature on  $\mu P$ , the  $V + v + T$  to Spec- $\mu P$  should agree with the clitics after they move to the edge of  $\mu P$ . In the end, TOPP is adopted to host the first element in the linearisation of V3. The construction without CP is spelt-out without any problems because TP is a relevant phase, as stated earlier in this section.

## 6 Conclusions

This paper shows the linearization of V3 order in OE from the perspective of successive cyclicity, which is based on the earlier literature on diachronic syntax.

However, the phonological analysis of V3, which is proposed by Speyer (2010), should be explored much more in the future, cooperating with the advance of the late minimalist theory of diachronic syntax.

Roberts (2012), which follows Cardinaletti and Roberts (2002), explores comparative syntactic study of V2 in many languages in the earlier minimalist theory, would also be significant for further study.

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## Notes

- (1) Ringe and Taylor (2014) don't illustrate a tree-diagram for their analysis of V2 constructions.
- (2) Chomsky (1995: 146) discusses *Agr*, as 'one might rather expect *Agr* to dominate *T*, since it presumably stands in a government relation with the subject in tensed clauses, to yield the standard subject-verb agreement phenomena'. The latest version of the minimalist theory doesn't adopt *AgrP*, however, it still seems useful to maintain *AgrP* for comparative syntax.
- (3) Ringe and Taylor (2014: 399) analyse that finite verbs occupy head position of CP through V-to-C movement in operator-fronting V2, and that those occupy the functional head position the TP domain in the case of non-operator V2.
- (4) Ringe and Taylor (2014: 400–1) observe that inversion occurs in the case of non-pronoun subject as in (2a), and that no-inversion is common in principle. The subject position in the case of inversion occupies the lower subject position, and that in non-inversion occupies the higher subject position respectively.
- (5) They tentatively adopt FP, defining [w]e remain neutral on its precise properties and call it FP.
- (6) They only alternate the analysis, citing the proposal that the object pronouns preceding the finite verb in such cases are head-clitics adjoined to *T* (Wallenberg 2009: 269ff.).
- (7) 'X' in Citko (2014: 187) should be corrected.
- (8) 'Y' in Citko (2014: 187) should be corrected.

- (9) Citko (2014: 188) discusses [t]he relationship between Fox & Pesetsky's Spell-Out domains and phases (or complements of phase heads) is also not quite transparent. Given that *v*P is a phase, the Spell-Out domain should be a VP, which is consistent with their proposal. However, on standard assumptions about phases and successive cyclic movement, movement takes place through the edge of the phase (*v*P) not through the edge of the Spell-Out domain (VP).
- (10) Pronominal object shift is obligatory in Danish for V2 requirement.
- (ii) a. \*Hvorfor købte<sub>v</sub> Peter - ikke t<sub>v</sub> den<sub>1</sub>?  
      why     bought Peter   not   it  
      b. Hvorfor købte<sub>v</sub> Peter den<sub>1</sub> ikke t<sub>v</sub> t<sub>1</sub>?  
      why     bought Peter it     not
- (Müller 2007: 65, (6ab))
- (11) Cardinaletti and Roberts (2002) discuss the V3 construction in OE, comparing it to Old High German, Old French, and similar languages. It goes beyond the scope of this paper to take up such languages.
- (12) Cardinaletti and Roberts (2002) explain how the finite verbs move to Agr1° in Note (13) as follows:
- [I]t is not clear how the mechanism of morphological selection can be adapted since selection always requires that the selecting element govern the selected element.
- (13) Cardinaletti and Roberts (2002) argue that the clitics occupying Agr1° are proclitics, invoking the 'Tobler-Mussafia Law' in the traditional literature, which is a phonological theory, not a syntactic one.

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